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(54) Title: PHOSPONATE NUCLEOSIDES USEFUL AS ACTIVE INGREDIENTS IN PHARMACEUTICAL COMPOSITIONS FOR THE TREATMENT OF VIRAL INFECTIONS, AND INTERMEDIATES FOR THEIR PRODUCTION

(57) Abstract: The present invention relates to novel phosponate nucleosides, more specifically to novel phosponalkoxy substituted nucleosides. The invention further relates to compounds having HIV (Human Immunodeficiency Virus) replication inhibiting properties and to compounds having antiviral activities with respect to other viruses. The invention also relates to methods for preparation of all such compounds and pharmaceutical compositions comprising them. The invention further relates to the use of said compounds as a medicine and in the manufacture of a medicament useful for the treatment of subjects suffering from HIV infection, as well as for treatment of other viral, retroviral or lentiviral infections and to the treatment of animals suffering from FIV, viral, retroviral or lentiviral infections.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07H A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WU, TONGFEI ET AL: "Deoxythreosyl phosphonate nucleosides as selective anti-HIV agents" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY , 127(14), 5056-5065 CODEN: JACSAT; ISSN: 0002-7863, 2005, XP002339526 the whole document	1-11
X	MCNULTY, JAMES ET AL: "On the direct 2,3-hydroxyl-group differentiation of tartaric acid esters" TETRAHEDRON LETTERS , 43(21), 3857 -3861 CODEN: TELEAY; ISSN: 0040-4039, 2002, XP002339527 compound 9	5
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DUJARDIN, GILLES ET AL: "Asymmetric endoselective '4+2' heterocycloadditions of styrene dienophiles with chiral benzylidenepyruvic esters. Total synthesis of (-)-O-dimethylsugiresinol" TETRAHEDRON LETTERS , 38(9), 1555 -1558 CODEN: TELEAY; ISSN: 0040-4039, 1997, XP002339528 compound 6	5
A	----- GRIENGL, HERFRIED ET AL: "Phosphonoformate and phosphonoacetate derivatives of 5-substituted 2'-deoxyuridines: synthesis and antiviral activity" JOURNAL OF MEDICINAL CHEMISTRY , 31(9), 1831-9 CODEN: JMCMAR; ISSN: 0022-2623, 1988, XP002036743	
A	----- LAMBERT R W ET AL: "SYNTHESIS AND ANTIVIRAL ACTIVITY OF PHOSPHONOACETIC AND PHOSPHONOFORMIC ACID ESTERS OF 5-BROMO-2'-DEOXYURIDINE AND RELATED PYRIMIDINE NUCLEOSIDES AND ACYCLONUCLEOSIDES" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. WASHINGTON, US, vol. 32, no. 2, January 1989 (1989-01), pages 367-374, XP002911756 ISSN: 0022-2623	
A	----- KIM C U ET AL: "REGIOSPECIFIC AND HIGHLY STEREOSELECTIVE ELECTROPHILIC ADDITION TO FURANOID GLYCAL SYNTHESIS OF PHOSPHONATE NUCLEOTIDE ANALOGUES WITH POTENT ACTIVITY AGAINST HIV" JOURNAL OF ORGANIC CHEMISTRY, AMERICAN CHEMICAL SOCIETY. EASTON, US, vol. 56, no. 8, 1991, pages 2642-2647, XP002301628 ISSN: 0022-3263	